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On-Line Averaging with LINC-8 by Frederick L. Hiltz, Ph.D.

Error in Standard Deviation Computations Due to Truncation of the Mean by D. S. Ruchkin and N. I. Flemming

A General Purpose Programming System for the LINC Computer by Lloyd Marlowe

Backus-Normal-Form Compiler/Interpreter for Medical-Record Editing by P. A. Castleman and S. U. Robinson, III

Analysis of Single Cell Activity in the Central Nervous System by Phillip J. Best*

A Real-Time System for Operant Conditioning Using the PDP-8 by Robert H. Tedford

Digital Computers in the Behavior Laboratory by Bernard Weiss

A Notational System and Computer Program for Behavioral Experiments by A. G. Snapper and R. M. Kadden

DECUS BIOMEDICAL SYMPOSIUM - JUNE, 1967 (continued)

EKG Program Analysis Using the CRO and Calcomp Plotter by J. A. Burdeshaw and M. D. Perry

Remote Laboratory Input/Output Signal Conditioning Unit by Michael D. Perry

Real-Time Measurement of the Spontaneous Morphologic Variations of the Electrocardiographic P-Wave by M. D. Woolsey*

On-Line Analysis of Telemetered Arterial Pressure by George A. Bradfute, Jr.

A Sample Data System for Chemical Analyzers by Alan Theesfeld*

Software for Automated Mass Spectrometry by W. Reynolds, J. Bridges, T. Coburn, and R. Tucker

DECUS THIRD EUROPEAN SEMINAR - OCTOBER, 1967

PDP-8

A Speech Synthesizer Controlled by a PDP-8/338 by W. A. Ainsworth

A PDP-8 for On-Line Data Collection in an Electrolytic Tinning Line by H. Broekhuis

Writing of a Compiler for a Subset of the Scientific Language ALGOL on the PDP-8 (4K) by D. Clauzel

The Connection of Digitisers to a PDP-8 by R. Cooper and J. Read

Use of Laboratory Models in Hybrid Simulation by J. W. Elder

A KDF-9 Tape Channel Simulator by R. H. Jones and V. E. Kassessinoff

A DECtape Operating System for a PDP-8 Used in On-Line Data Collection by Dr. E. E. Maslin

A Stimulus-Response Programme for Hotel Room Inventories by D. W. Roberts

Assessment of Data from an Automatic Neutron Diffractometer Installation by J. W. Hall and K. C. Tuberfield

Cassandra - A Megachannel Time-of-Flight Analyzer by J. W. Hall

On-Line Debugging in a Real-Time System by S. de Vries

DECUS THIRD EUROPEAN SEMINAR - OCTOBER, 1967 (continued)

PDP-7

On-Line Particle Identification by P. R. Alderson and K. Bearpark

An Interface Between the PDP-7 and an IBM 2311 Disc File by R. A. Hunt

On-Line Handling of Nuclear Data by G. L. Murray

PDP-6

A Simple FORTRAN Compiler for Conversational and Other Use on the PDP-6 by R. Prescott

FALL 1967 DECUS SYMPOSIUM

A Computer Controlled Diffractometer by Howard Cohodas*

The Integrator/Computer System for Gas Chromatography Data Automation by A. T. Barrett, III

Data Acquisition and Analysis of High Resolution Mass Spectra in Real Time by M. L. Cramer and D. J. Waks

PDP-9T: Compatible Time-Sharing for the Real-Time Laboratory by M. M. Taylor, D. M. Forsyth, and L. Seligman

A Digital Electrochemical Control and Data Acquisition System by George Lauer and R. A. Osteryoung

Time-Shared Computer Control in Analytical Chemistry by Jack W. Frazer

Dedicated Computers for Instrument Control by Roger E. Anderson*

A Real Time Air Pollution Analysis System by Carter L. Cole

Automobile Exhaust Analysis System by Robert Jahncke

LINC-8 Text-Handling Software for On-Line Psychophysical Experiments by B. Michael Wilber

The LINC-8 in Research on Speech by Richard Harshman and Peter Ladefoged

Processing Physiological Signals by (Miss) Maxine Paulsen

Development of Cardiovascular Pulmonary Patient Care Techniques by Jerome A. G. Russell*

A Programmed Distribution Generator by David N. Samsky

Analysis of Multichannel Analyzer Data with Light Pen and Function Box Techniques by C. Wendell Richardson

Automatic Calibration and Evaluation of Multichannel Analyzers Using a PDP-8 by W. Wayne Black

Tape Recorder I/O Operation in a PDP-8 Controlled Beta-Ray Spectrometer System by J.J.H. Park and J. Ohkuma

Adaptations of PDP-8 FORTRAN for Laboratory Computing by Russell B. Ham and Christopher B. Nelson*

An Integrated Disk-Tape Operating System for the 338 Buffered Display Computer by Jerrold M. Grochow and Thomas P. Skinner

Computers in the Laboratory: Education by Ronald G. Ragsdale

A Computer Data Link for High-Energy Physics Experiments by Sypko W. Andreae

Error Checking and Other Aspects of Data-Link Organization by Robert W. Lafore

Transmission of Link Data Over Telephone Lines by Alan E. Oakes

QOLFIM - An On-Line Film Measuring System (PDP-5/8) for the Processing of Bubble Chamber Photographs---Mark II by B. B. Culwick, E. Glazer, B. Lebowitz, and T. Meehan*

Gamma Ray Spectrum Stripping by F. Riess

Real-Time Data Analysis with FORTRAN by Albert Anderson

A Non-Linear Least-Squares Search Routine for a Small Computer by Thornton R. Fisher

Use of a PDP-9 for Real Time Off-Line Analysis of Spectra from an Aerial Survey for Radioactive Minerals by C. J. Thompson

The PDP-9 System at the University of Manitoba Cyclotron by L. W. Funk, J. V. Jovanovich, R. Kawchuck, R. King, J. McKeown, C. A. Miller, D. Peterson, D. Reimer, K. G. Standing, and J. C. Thompson

Track Follower - A System for Bubble Chamber Track Recognition by James P. Taylor

A Tutorial on Numerical Analysis with an Emphasis on Error Analysis and Prediction by Wayne A. Muth and Bruce C. Davis

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On-Line Psychoacoustic Experimentation With A Minimal PDP-8/S by C. Douglas Creelman

The Western Multi-Computer System by G. T. Lake

PDP-9T: Compatible Time-Sharing For The Real-Time Laboratory by M. M. Taylor, D. M. Forsyth and L. Seligman

Use Of Interative Processes In Evaluation Of Stresses In Statically Indeterminate System Of Elastic Bars by Adolph Feingold and Herbert R. Alcorn

Automatic Processing Of Absorption Spectra by Roch Lafrance

A Program To Simulate Nand Logic Systems* by I. A. Davidson

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A Remote Interface For A PDP-8 by Pierre Goyette

Some Experiences In Interface Design And Fabrication by E. J. Gabe and R. H. Goodman

A Six Channel Multiplexer For The PDP-8 Data Break Facility by R. Krishna

* Abstract Only

SPRING 1968 DECUS SYMPOSIUM

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On-Line Analysis Of Wire Spark Chamber Data by P. F. Niccolai, R. H. Bicker, M. Edwards and C. Swannack

SPRING 1968 DECUS SYMPOSIUM (continued)

PDP-8 On-Line Data Acquisition System For High Energy Physics* by Paul Shrager and Larry Taylor

The On-Line Use Of A PDP-9 And An IBM 360/65 In A Proton-Proton Bremsstrahlung Experiment Using Wire Chambers by D. Reimer, J. V. Jovanovich, J. McKeown and J. C. Thompson

Automatic Film Measurement With A PDP-9 by C. Drum, T. McGrath and R. Van Berg

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Closing The Educational Loop In Applied Mathematics (The On-Line Classroom) by J. W. Elder

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Use Of PDP-8 For Driving Photocomposition Machines* by Richard Falt

PDP-9T Timesharing: Phase I, Multiprogramming by D. M. Forsyth, M. M. Taylor and S. Forshaw

Extended Memory Fortran With An 8K PDP-7 by Philip R. Bevington

Implementation Of An On-Line Reactive (Typewriter) Language* by David Z. Polack

Disc Version Of Strip — A Data Display And Analysis Program For The PDP-8, 8/I by John Alderman

*Abstract Only

SPRING 1968 DECUS SYMPOSIUM (continued)

PDP-8 Oscilloscope Display Of Mathematical Functions Using Fortran by August E. Sapega and Stephen G. Wellcome

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A Real-Time Multiple Task Executive Program With A Built-In Console Utility Package For PDP-8/S And PDP-8 Computers by C. D. Martin, Jr., and R. L. Simpson

FOCAL* by Rick Merrill

A PDP-6 Language For Simulating Complicated Biochemical Systems by David Garfinkel

A General Language For On-Line Control Of Psychological Experimentation by J. R. Millenson

A Tape Store For Biochemical Data by Harold W. Shipton

Automatic Spectrophotometric Identification Of Bacteria by Alan Ferry and Richard Martin

FOURTH EUROPEAN SEMINAR

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Additions To The "8" Fortran System And Its Use With LINC-8 Magnetic Tape by G. R. Hervey

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Sypol/Symag — An Extension To The Patch-Making Facilities Of DDT by I. Alcock

The Liverpool On-Line Data Acquisition And Analysis System by P. R. Alderson, N. Dawson and P. J. Twin

Pseudo-Random Digital Transformation In Megachannel Analysis by V. Bonacic, B. Soucek and K. Ceiljat

Integration Of Two PDP-8, A Multichannel Pulse Height Analyser And A DECtape In Nuclear Experiments by R. Chaminade, J. Pain, J. C. Faivre, M. L. Lechaczynski, J. Durruty, J. Demeuzois and J. C. Fabre

*Abstract Only

FOURTH EUROPEAN SEMINAR (continued)

Use Of A PDP-8 For On-Line Processing Of Reactor Data by M. E. Windsor and M. R. Avery

Recent Hardware And Software Developments For PDP-8 by I. K. O. Bol

Short Survey Of The Installation And Program Development At The Tandem-Lab Erlangen by H. J. Trebst

Some Examples For The Application Of An X-Y Plotter by H. J. Trebst

A Program System For Pulse Height Analysis by T. Schlurick and H. J. Trebst

A Program System For Two-Dimensional Pulse Height Analysis With High Resolution by P. Elzer and H. J. Trebst

Three Small On-Line Computers For Blast-Furnace Control by H. Broekhuis

A Small Computer As An Aid In Steelmaking by M. van Overveld

The PDP-8 Gier Installation At The Research Organization Sintef, The Technical University Of Norway by Bengt Jorgensen

On-Line Statistical Analysis Of Surface Roughness By Means Of A PDP-8 Data Processor by Jan Erik Torjusen

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On-Line Control Of Psychological Testing: The Perceptual Maze Test by Alick Elithorn, David Jones and Eileen Kydd

Use Of LINC-8 For Processing Electrical Activity Of The Brain In Man by R. Cooper, W. J. Warren, W. Grey Walter, W. C. McCallum and V. J. Aldridge

Direct Computer Measurement And Evaluation Of The Electrical Activity Of Nerve Cells by C. M. Malpus

Preparation Of ECGS For Computer Analysis by Peter W. Macfarlane

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Batman — An Editing And Assembly System For A PDP-8 Computer With A Drum Backing Store by Miss M. R. Avery

A Flexible Controller For Multi-Loop D.D.C. by J. M. Eskes

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Introduction Of A Hybrid Computer EAI 680/PDP-8 And Review Of Some Utility Programs Developed by K. Soe Hojberg

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The Gaschrom-8 System by Bradley Dewey III and Gary Cole

Computers And Nuclear Magnetic Resonance Spectroscopy by Charles Spector and Bradley Dewey III

Real Time Acquisition And Display Of Mass Spectra by P. D. Siemens

On-Line Data Reduction From Cary 14, 15 and 60 Spectrometers by Martin Itzkowitz and Barrett L. Tomlinson

Data Acquisition And Control Of A Spectrophotofluorimeter by Robert H. McKay, Frank Neu and Myron Myers

Weather And A PDP-8/S by T. McGovern and R. E. Archinuk

A Flexible Data Acquisition And Control System by G. E. Stokes and D. R. Staples

A Modular Analog Digital Input Output System (ADIOS) For On-Line Computers by R. W. Kerr, H. P. Lie, G. L. Miller and D. A. H. Robinson

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Lexigraph: An Interpretive Language For Graphics by Dr. Daniel M. Forsyth

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VIDAC — A Data Acquisition System by Noel P. Lyons and Robert W. Skyles

EXPO — A flexible PDP-8 Data Acquisition Program by Bruce Arne Sherwood

SCHLEP by Michael Greenblatt

A Programmed Control And Instrumentation System For A Nuclear Reactor by J. R. Kosorok

The Use Of The PDP-8 In Automated Test Systems At Sandia Laboratories by Glenn Elliott

Computer Control Of Hydraulic Tests by Lyndon A. Thomas

Queue Structures In A PDP-9 Data Acquisition System by Barry L. Wolfe and Sol B. Metz

Computer Controlled Tire Force Analysis System by Richard A. Cabot

A Seismic Data Analysis Console by P. L. Fleck

Coordinate Measuring Machines And Computers by Neale F. Koenig

Graphics — Terminal Communications Package by Barry R. Borgerson

Graphic Software System Using A PDP-9/339 Supported by a RMØ9 Drum by Glen C. Johnson

Real-Time Computing Within A Time-Sharing System by Peter Hurley

Design And Use Of A Databreak Display Facility For PDP-8 by E. R. F. W. Crossman

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An Executive For A Remote Interactive Graphics Terminal by C. G. Conn and P. T. Hughes

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A Patchboard-Oriented Digital Logic Breadboard by Fred F. Coury

ARBUS — Advanced Bed Reservation And Utilization System by Robert P. Abbott and Judith Ford

Design Philosophy Of An Integrated Laboratory-Hospital Information System by Garth Thomas

The PDP-8/I As A Satellite Computer For Bio-medical Applications (Systems Software) by R. Bush, D. Domizi, R. Lee and M. McKeown

Life With A Laboratory Computer System by Irwin R. Etter

Diagnostic Uses Of The Averaged Evoked Potential In Clinical Neuropsychiatry by Enoch Callaway

A Design Criteria For DDC System For Ultrasonic Irradiation Of Brain by Hideo Seo

An Approach To Micro-Image Encoding And Area Scanning Of Cells Or Nucleoli Of Brain by Hideo Seo

Use Of A PDP-8/S Computer For On-Line Monitoring And Control Of Blood Glucose In Human Subjects by Arnold H. Kadish

A Computer Controlled Contractile Component Length Clamping Technique For Skelethal Muscle by Paul J. Paolini, Jr.

Flirt: File Language In Real Time by Kenneth R. Morin

Recent Experience In Designing Modular Interfaces Using M-Series Logic by Gary B. Morgan

A Data Communication System For The PDP-8 In Arbus by Thomas G. Taussig

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A Disc Oriented Real-Time Executive For The PDP-8/S Computer by W. T. Lyon

TMF — A Procedural Software Package For Biomedical And Scientific Application On The PDP-8 by Fred R. Sias, Jr. and Allen B. Wilson

Accessing Data Arrays And Teletype Text Input/Output by David G. Frutchey

Fasbac PDP-9 Time Sharing Operating System by V. J. Zapotocky

PDP-9T Time Sharing: Progress Report 12/68 by M. M. Taylor and D. M. Forsyth

Operating The Keyboard Monitor System From A Disk by C. Wendell Richardson

PDP-9 Monitor System Workshop by David Leney and James Murphy

Synchronous Communication Interface For The PDP-10 by Norman Housley

Rapid Program Generation Program by William F. Weiher and Richard P. Gruen

A Flying Spot Scanner On-Line To A PDP-6 by I. G. Nicholls and C. L. Jarvis

DIGITAL EQUIPMENT COMPUTER USERS SOCIETY
Maynard, Massachusetts 01754/Tel. 897-5111/TWX 710 347-0212

NEWS FROM DECUS PDP-8 PROGRAM LIBRARY

NEW PROGRAMS - READY FOR DISTRIBUTION

DECUS NO. 8-314 - 8K FORTRAN Library CR8/I Card Reader Input Routine (Reads 12 row, 80 column punched cards by a simple FORTRAN statement, as well as by input from the Teletype)
Author: Rainer Schongar
Available: Binary and ASCII paper tapes, write-up

DECUS NO. 8-342 - STAP-8; Spike Train Analysis Program (Basic statistical analysis of stochastic point processes)
Author/Submitter: Urs R. Wyss/Charles Merrill
Available: Binary paper tapes, write-up

DECUS NO. 8-354 - Pass 3 ASR 33 Format Overlay (Automatically formats output on ASR 33 into page size blocks)

Author: Frank Melchior, Jr.
Available: Binary and ASCII paper tapes, write-up which includes listing

DECUS NO. 8-355 - PAL III .75 (Enables PAL III to generate links for off-page references automatically)
Author: E. D. Huthnance
Available: Binary and ASCII paper tapes, write-up

DECUS NO. 8-357 - ISOMER - Interactive Study of Organic Molecules by Educational Reinforcement (Computer assisted instruction)
Author: Dr. James W. Cooper
Available: Binary and ASCII paper tapes, write-up, listing at a handling charge

DECUS NO. 8-359 - HI-Q Game Playing Program (A game played with pegs on a cross-shaped board)
Author: M. L. Fichtenbaum and R. E. Peterson
Available: Binary paper tape, write-up which includes listing

DECUS NO. 8-360 - ASCII to FRIDEN (EIA) (Converts from ASCII to Friden (EIA) using a specific restricted character list)
Author: Arnold V. Fish
Available: Binary paper tape, write-up which includes listing

DECUS NO. 8-361 - Game of Chance (Similar to a dice game, but a little harder to win)
Author: Randall S. Battat
Available: Write-up which includes listing

DECUS NO. 8-363 - DATOUT: A Simple Routine for Printing Sequential Data as an Array
Author: Barry Millman
Available: Binary and ASCII paper tapes, write-up which includes listing

DECUS NO. 8-367 - Digital 8-12-U Modified (Allows the Incremental Plotter Subroutine to recognize numbers in the range of ±2047 instead of from Ø to 4Ø95)
Author: Jud Gilbert
Available: ASCII paper tape, write-up which includes listing

DECUS NO. 8-368 - Tri-Data Cartrifile PAL III Assembler (Features include Cartrifile I-O capabilities, fixed formulating of listing output, page numbering)
Author: Jack R. Ellis
Available: ASCII paper tapes, write-up

DECUS NO. 8-369 - Tri-Data Cartrifile DEC Editor (DEC Editor modified to allow use of the Cartrifile as an input-output device)
Author: Jack R. Ellis
Available: Binary and ASCII paper tapes, write-up which includes listing

DECUS NO. 8-370A - FBUILD (Designed to read all paper tapes involved in FOCAL-LIBRA system and write the various sections in the correct tape blocks)
Author: L. Gordon, R. Helwig, M. Conrad, B. Taylor
Available: ASCII paper tape, write-up, listing at a handling charge

DECUS NO. 8-370B - DISK (Designed to maintain three 64K disk images upon a reel of DECtape, with facility for restoring images to disk and recording current contents of disk on tape)
Author: L. Gordon, R. Helwig, M. Conrad, B. Taylor
Available: ASCII paper tape, write-up, listing at a handling charge

DECUS NO. 8-371 - Teletype Control of ND50/50 Memory Unit (TYPED) (Allows quick access to Nuclear Data's 50/50 Memory and Display unit via ASR 33 teletype)
Author: W. J. Blanchard
Available: Binary paper tape, write-up which includes listing

DECUS NO. 8-372 - ML Editor (Machine Language Editor) (Useful for debugging, monitoring and editing program in core memory)
Author: Nobuhiro Sato
Available: Binary and ASCII paper tape, write-up

DECUS NO. 8-373 - LISP Disk Array (Allows user to store up to 4096 individual numbers on disk by a one-dimensional array)
Author: Gary Coleman
Available: Write-up which includes listing

DECUS NO. 8-374 - Binary or RIM Consolidator (Multiple input tapes, not necessarily in the same format, may be combined into one output tape)
Author: Garth Peterson
Available: Binary and ASCII paper tapes, write-up, listing at a handling charge

DECUS NO. 8-375A - 3 Page Floating Point Package (Packs 27 bits in 3 words)
Author: Richard Rothman
Available: ASCII paper tape, write-up, listing at a handling charge

DECUS NO. 8-375B - 3 Page Floating Point Package With Floating Output (As for 8-375A but with unformatted floating point output)
Author: Richard Rothman
Available: Binary and ASCII paper tapes, write-up, listing at a handling charge

DECUS NO. 8-376 - Field 1 Symbol Table Storage for PAL-D (Reduces assembly and listing time considerably)
Author: Peter Calder
Available: Binary and ASCII paper tapes, write-up

DECUS NO. 8-377 - One Pass Assembler (For on-line use; assembly made directly into memory; paper tape in BIN or RIM format may be punched; op code field length limited to three characters; indirect addressing and linking available)
Author: Barney Hordos III
Available: Binary paper tape, write-up

DECUS NO. 8-378 - Map Directory Information on KV8/I (Gives a complete picture of the directory)
Author: Elmer J. Bourque
Available: Binary and ASCII paper tapes, write-up, listing at a handling charge

DECUS NO. 8-379 - Double Precision and Floating Point Interchanger (Conversion of double precision to floating point format and vice versa)
Author: Stephen J. Freeland and Dr. Fredi Jakob
Available: Write-up

DECUS NO. 8-380 - WATSNU (Used to: 1. Compare current core store and a binary tape without changing core. 2. Reload a binary tape and illustrate locations which are changed in the process)
Author/Submitter: P. C. Hallsall/ A. Cragg
Available: Binary and ASCII paper tapes, write-up which includes listing

DECUS NO. 8-433 - Extension to "LIBRA-FOCAL" (Changes to LIBRA-7 user FOCAL system (DEC-08-AJSE and changes to FOCAL 1969 (DEC-08-AJAE))
Author: B. Taylor, R. Helwig, A. Coston
Available: ASCII paper tape, write-up, listing at a handling charge

DECUS NO. FOCAL8-122 - Charge Account (Useful in teaching manipulation of subscripted arrays)
Author: Frederick W. Holzwarth
Available: ASCII paper tape, write-up which includes listing

DECUS NO. FOCAL8-123 - LOAD Command for FOCAL 1969 (Allows a FOCAL user to deposit into core instructions so as to modify FOCAL)
Author: Edward Steinfeld
Available: Binary and ASCII paper tapes, write-up which includes listing

DECUS NO. FOCAL8-128 - Probability (2P); From t ("STUDENT") Distribution (Calculates probability that a difference between means is due to chance)
Author: Dr. Milton Landowne
Available: ASCII paper tape, write-up which includes listing

DECUS NO. FOCAL8-129 - FOCAL Readable Punch (Will punch tape-high readable characters using low-speed punch)
Author: Thomas J. Ford
Available: ASCII paper tape, write-up

DECUS NO. FOCAL8-134 - 1-20 Counting Game (Enables the user to play the 1-20 counting game with the computer)
Author: John Ernst
Available: Binary paper tape, write-up which includes listing

DECUS NO. FOCAL8-139 - Universal Input/Output for FOCAL (Allows the FOCAL user to execute I/O commands, load external registers and read them, and test for "skip" conditions, without requiring other assembly language patches.)
Author: John Alderman
Available: Binary paper tape, write-up which includes listing

DECUS NO. FOCAL8-145 - FOCAL for Disk and DECtape With Program Chaining (An on-line data acquisition and processing system, useful for control of special devices)
Author: Lloyd B. Robinson
Available: Object and Source files on DECtape, write-up, listing at a handling charge

DECUS NO. FOCAL8-146 - Zeller's Congruence/Day of the Week (Stresses usefulness of being able to calculate ones way to a position it's not physically possible to occupy)
Author: Thomas J. Ford
Available: ASCII paper tape, write-up which includes listing

DECUS NO. FOCAL8-147 - Interaction Analysis (Useful tool for the measurement of verbal interaction in the classroom)

Author: Thomas J. Ford
Available: ASCII paper tape, write-up

DECUS NO. FOCAL8-149 - CHECKERS (A game of checkers, player versus computer)
Author: Paul M. Klinkman
Available: ASCII paper tape, write-up

DECUS NO. FOCAL8-150 - FRAN8 (Version of Brady's pseudorandom number generator rewritten for FOCAL '69 without extended functions)

Author: Paul Fingerman
Available: Binary and ASCII paper tapes, write-up which includes listing

DECUS NO. FOCAL8-151 - Fast Matrix Inversion for Real Numbers (Will invert a matrix, up to size 17 X 17, of real numbers using modified Gauss-Jordan methods)

Author: Richard Merrill
Available: ASCII paper tapes, write-up which includes listing

DECUS NO. FOCAL8-153 - Two Overlays for FOCAL '69, FEXP-X-P and FLOG (Relocates FOCAL '69 exponential function into an area of core usually assigned to the high speed reader, and adds two new commands to this area)

Author: C. Ediss
Available: Binary paper tape, write-up which includes listing